



Randall S. Rich
Partner

2000 K Street NW, Suite 500
Washington, DC 20006-1872
Phone: 202.828.5879
Fax: 202.857.2125
rrich@bracepatt.com

January 9, 2004

Felecia L. Greer
Executive Secretary
Public Service Commission of Maryland
William Donald Schaefer Tower
6 St. Paul Street - 16th Floor
Baltimore, MD 21202

BY HAND

Re: *In the Matter of the Inquiry into Electric Generating Resource Adequacy*, Case
No. 8980

Dear Secretary Greer:

Pursuant to the Commission's Notice issued October 15, 2003 in the referenced proceeding, Reliant Resources, Inc. ("Reliant") submits an original and fourteen (14) copies of the Reply Testimony of Frederick John Meyer. Reliant has also enclosed a diskette containing an electronic version of the filing. We also have enclosed a receipt copy and a self-addressed express envelope for return of a stamped-in copy to the undersigned.

Please contact the undersigned if you have any questions.

Very truly yours,

Bracewell & Patterson, L.L.P.

A handwritten signature in black ink, appearing to read 'Randall S. Rich'.

Randall S. Rich*

Enclosure
cc: All Parties on Service List

* Not admitted in Maryland

Before the Maryland Public Service Commission

Case No. 8980

Reply Testimony of Frederick John Meyer

on Behalf of

Reliant Resources, Inc.

January 9, 2004

**REPLY TESTIMONY OF FREDERICK JOHN MEYER
ON BEHALF OF RELIANT RESOURCES, INC.**

I. INTRODUCTION

Q: PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A: My name is Frederick John Meyer. I am Vice President of Regional Transmission Organization Activities for Reliant Resources, Inc. ("Reliant"). My business address is 1000 Main Street, Houston, Texas 77001.

Q: DID YOU PREVIOUSLY PROVIDE TESTIMONY IN THIS PROCEEDING?

A: Yes. I provided Initial Testimony on behalf of Reliant on December 5, 2003.

Q: PLEASE SUMMARIZE YOUR RESPONSE COMMENTS.

A: The testimony and comments of other parties generally focused on three alternatives for resource adequacy: 1) the current PJM ICAP model; 2) the New York ISO ("NYISO") demand curve; and 3) the Resource Adequacy Model ("RAM") proposal. My Reply Testimony describes how each of these approaches fails certain basic principles for a well-designed and reasonable resource adequacy mechanism. As stated in my Initial Testimony, the basic principles that should be included in a reasonable resource adequacy model are: 1) a sufficiently forward looking design; 2) elimination of significant barriers to entry; 3) enforceability to ensure there are no free riders; 4) utilization of asset-backed and deliverable resources that are able to produce energy (or not consume energy in the case of load acting as a resource); 5) accommodation of retail access programs. In turn, I will compare how Reliant's Regional Reliability Commitment ("RRC") meets these principles and how the other proposed

1 alternative models fail to meet certain of these principles. These comparisons will
2 also address how the RRC resolves many of the concerns expressed by other
3 parties to this proceeding.

4 **Q: IN YOUR INITIAL TESTIMONY, YOU RECOMMENDED THAT THE**
5 **COMMISSION ADOPT THE RRC AS ITS PREFERRED APPROACH TO**
6 **RESOURCE ADEQUACY AND FURTHER SUPPORT THE RRC AT THE**
7 **VARIOUS REGIONAL STAKEHOLDER PROCEEDINGS. DID OTHER**
8 **PARTIES RECOMMEND THAT THE COMMISSION SHOULD**
9 **ACTIVELY PARTICIPATE IN THE VARIOUS REGIONAL**
10 **STAKEHOLDER PROCEEDINGS?**

11 **A:** Yes. Baltimore Gas & Electric (“BGE”) witness Mr. Pino noted that the
12 Commission should “continue its leadership role with MACRUC, and to work
13 with PJM” (Pino at 13, lines 24-25). Consolidated Edison Energy, Inc.
14 (“ConEd”) recommended the Commission “take an active role and work with
15 PJM” (ConEd at 2). Mr. Rychert of the Delmarva Power & Light Company and
16 Potomac Electric Power Company (collectively, “PHI Companies”) believes that
17 “the State Commissions can play a significant role in helping PJM and the
18 stakeholder groups through the Commission Staff participation at the stakeholder
19 level” (Rychert at 21, lines 6-9). PJM witness Mr. Herling noted, “state regulator
20 input into the elements that would have rate impacts is essential” (Herling at 44,
21 line 4). These sentiments, while not necessarily providing explicit support for
22 Reliant’s RRC model, do provide an appropriate approach for the Commission to
23 take at PJM and other stakeholder proceedings.

1 **II. BASIC PRINCIPLES FOR RESOURCE ADEQUACY**

2 **Q: YOUR SUMMARY ABOVE MENTIONED SEVERAL BASIC**
3 **PRINCIPLES FOR A REASONABLE RESOURCE ADEQUACY MODEL.**
4 **HAVE YOU PREVIOUSLY DESCRIBED THE BASIC PRINCIPLES FOR**
5 **RESOURCE ADEQUACY IN DETAIL?**

6 **A:** Yes. My Initial Testimony includes a detailed description of the principles listed
7 above and why they are important. I also have included a comparative checklist
8 as Exhibit A to this Reply Testimony that demonstrates the ability of the RRC, the
9 PJM ICAP model, the NYISO Demand Curve, and the RAM model to meet these
10 principles. Each of these resource adequacy models were either proposed or
11 supported in various parties' Initial Testimony. Notably, the RRC is the only
12 proposal to achieve all of these principles.

13 **Q: BGE WITNESS WILLIAM B. PINO ALSO STATES BROAD**
14 **PRINCIPLES FOR ACHIEVING RESOURCE ADEQUACY. DOES THE**
15 **RRC MODEL ACHIEVE THESE PRINCIPLES?**

16 **A:** Yes. Mr. Pino's first principle is that the resource adequacy model should adopt a
17 logical and predictable mechanism that induces investment in new generation
18 (Pino at 5, lines 10-11). The RRC accomplishes just that. By providing a market-
19 based forward-looking model that reduces barriers to entry, the RRC provides a
20 sensible and known mechanism for all market participants. Thus, the RRC
21 provides for resource adequacy via market-based models that will induce
22 investment in new resources when needed. In addition, the forward-looking price

1 for capacity allows Load Serving Entities (“LSEs”) greater ability to predict their
2 future costs for capacity.

3 Mr. Pino’s second principle is the need for regulatory certainty at the wholesale
4 procurement level and wholesale power generation level (Pino at 5, lines 19-22).

5 While the RRC model on its own cannot provide this certainty, the model is a
6 stable market-based approach that regulators can rely on to assure resource
7 adequacy. It is important to note that no resource adequacy model described in
8 this proceeding can provide regulatory certainty on its own. Only the regulator
9 can provide regulatory certainty. A model that has the foresight to operate for
10 future years by meeting the required principles will allow the Commission to
11 adopt the model and rely on it, thereby providing the certainty that Mr. Pino states
12 is needed. RRC provides the Commission the model by which to accomplish this.

13 **Q: PHI COMPANIES’ WITNESS PAUL T. RYCHERT STATES BROAD**
14 **OBJECTIVES FOR ACHIEVING RESOURCE ADEQUACY. DOES THE**
15 **RRC MODEL ACHIEVE THESE PRINCIPLES?**

16 **A:** Yes. Mr. Rychert’s first principle is that the cost of capacity should be fairly
17 distributed among all LSEs (Rychert at 7, lines 2-4). The RRC accomplishes this
18 by distributing capacity costs based on each LSE’s actual load ratio share. This is
19 the most appropriate approach to distribute the costs of a regional resource
20 adequacy construct since the need for adequate resources is predicated on having
21 the resources necessary to serve load. Mr. Rychert’s second principle is the need
22 for a forward capacity market structure with price signals that result in timely
23 construction of capacity resources for PJM (Rychert at 7, lines 13-19). With its

1 three-year forward approach, the RRC ensures that new resources, including new
2 generating units, are able to participate in the RRC auction and support resource
3 adequacy. Finally, Mr. Rychert suggests that each LSE should be responsible for
4 an amount of capacity equal to its varying share of PJM's total capacity obligation
5 (Rychert at 7, lines 19-22). As described above, the RRC accomplishes this by
6 assigning capacity costs based on each LSE's actual load ratio share. Thus, the
7 assignment of actual capacity obligations and costs is not based on a forecast or
8 approximation of load, but the LSEs share of actual load served on the system.
9 Furthermore, this is measured coincident to the period that is determined to be
10 critical for resource adequacy, whether it be a 5 coincident peak measurement or 4
11 peaking months of the year.

12 **Q: PJM WITNESS STEVEN R. HERLING NOTES SEVERAL KEY**
13 **CRITICAL GOALS TO ENSURE LONG TERM RELIABILITY AND**
14 **MARKET COMPETITIVENESS. DOES THE RRC ACCOMPLISH**
15 **THESE GOALS?**

16 **A:** Generally, yes. Mr. Herling's first goal is the economic performance of the PJM
17 transmission system (Herling at 17, line 19). While RRC cannot directly impact
18 the economic performance of the transmission system, the RRC's structure
19 complements an RTO's ability to run its transmission system economically. Mr.
20 Herling testifies that the second goal is the provision of appropriate incentives for
21 transmission owners to invest in infrastructure (Herling at 17, lines 20-21). Since
22 transmission is expected to be a regulated service for the foreseeable future, most
23 incentives for investment will come from regulated rates of return. The RRC

1 model does not affect a regulated transmission entity's ability to provide a least
2 cost solution to congestion or other infrastructure needs where appropriate and
3 economical. Since these goals are transmission-specific in nature, they cannot be
4 adequately addressed via a resource adequacy mechanism as proposed by the
5 parties to this proceeding. However, the RRC does not interfere with the RTO's
6 ability to achieve these goals.

7 The third goal Mr. Herling describes is the provision of appropriate incentives for
8 generation developers to invest in infrastructure (Herling at 17, lines 22-23).
9 RRC achieves this through its forward-looking auction process which sends a
10 market-based price signal to all potential participants. When investment in
11 generation is warranted, new entrants will commit resources to PJM's
12 infrastructure.

13 The fourth goal is the minimization of price volatility on consumers (Herling at
14 18, line 1). RRC supports this by creating a stable capacity price each year to
15 achieve resource adequacy. In addition, the existence of a well-designed and
16 reasonable capacity market will reduce volatility in energy markets. RRC, with
17 its forward-looking design, will smooth out the current boom and bust cycles that
18 are inherent in the current PJM ICAP model. Smoothing out the boom and bust
19 cycles will lead to less price volatility on consumers.

20 Mr. Herling's final goal is to ensure the long-term resource adequacy of the PJM
21 region (Herling at 18, line 2). RRC achieves this goal via its forward-looking
22 design, its enforceability and utilization of asset-backed resources, and its
23 accommodation of retail access programs. While other approaches like the

1 current PJM ICAP market or the NYISO demand curve may accomplish long-
2 term resource adequacy, their flawed design will not alleviate the problems of
3 boom and bust cycles that result from not creating sufficiently forward auctions
4 that breakdown the barriers to new market entry. In both PJM's ICAP market and
5 the NYISO's demand curve, the market designs only consider the current year,
6 which at the time of auction will not allow sufficient time to recognize and
7 alleviate a resource shortage before it occurs. Looking closer at the NYISO
8 demand curve, one can see that it relies on both accurately setting the
9 administratively-determined demand curve and further ensuring that the demand
10 curve will not change over time to allow potential new entrants price certainty. In
11 stark contrast, the RRC is designed to permit market forces to determine the
12 appropriate balance between supply and demand without additional reliance on
13 administrative measures. While I believe these other approaches "can"
14 accomplish the goal of resource adequacy in combination with other price signals
15 sent through the energy and ancillary services market, they do not permit
16 sufficient time when the auction occurs to alleviate an identified resource shortage
17 and rely on unnecessary administrative price setting mechanisms. Therefore,
18 these other alternatives to the RRC approach are less effective at ensuring
19 resource adequacy, especially in smoothing out the current concerns of boom and
20 bust market cycles.

21 **Q: PSEG WITNESS DR. MURTY P. BHAVARAJU NOTES SEVERAL**
22 **IMPROVEMENTS THAT SHOULD BE MADE TO THE CURRENT PJM**

1 **ICAP MODEL. IF THE RRC MODEL WERE ADOPTED, WOULD**
2 **THESE IMPROVEMENTS BE REALIZED?**

3 **A:** Yes. First, Dr. Bhavaraju testifies that the resource adequacy model needs
4 broader participation by different types of resources, including energy contracts
5 backed by physical resources and demand-based contracts (Bhavaraju at 12, lines
6 10-15). The RRC model is intended to allow all types of deliverable and
7 verifiable capacity resources to participate on a level playing field, permitting
8 competition to determine which are most economical to achieve resource
9 adequacy.

10 Dr. Bhavaraju's second suggested improvement is the minimization of gaming via
11 an expanded planning horizon (Bhavaraju at 13, lines 3-4). This is consistent
12 with my Initial Testimony where I described that the three-year forward approach
13 to RRC eliminates significant barriers to entry and in turn eliminates opportunities
14 for the exercise of market power.

15 Dr. Bhavaraju's final improvement is to ensure that the cost of obtaining reserves
16 be known well in advance by all market participants with a mechanism for retail
17 suppliers to transfer the reserve obligation to the new supplier for future periods
18 (Bhavaraju at 13, lines 16-19). The ability of retail access programs to thrive
19 under an appropriate resource adequacy model is a central tenant of the RRC
20 model supported by Reliant. To accomplish this, the RRC capacity price is
21 known with the completion of the auction three-years forward. As currently
22 proposed, there is no prohibition of capacity contracts changing hands between
23 resource supplier and different LSEs. Finally, even if a new LSE is unable to

1 arrange bilaterally for capacity, it will pay only its actual load ratio share based on
2 the auction clearing price and the appropriate weighting for the time of year based
3 on loss of load probability. Thus, the cost of capacity obligations to the LSE is
4 relatively predictable. An explicit mechanism for the transfer of capacity
5 obligations between LSEs is unnecessary in the RRC model since the cost of the
6 obligation is based on the LSE's actual load ratio share.

7 **III. THE CURRENT PJM ICAP MODEL DOES NOT PROVIDE RESOURCE**
8 **ADEQUACY**

9 **Q: DID OTHER PARTIES DEMONSTRATE THAT THE CURRENT PJM**
10 **ICAP MODEL IS FLAWED?**

11 **A:** Yes. Several parties' testimony, including Mr. Pino of BGE (Pino at 6, lines 18-
12 27), the comments of ConEd (ConEd at 3), Mr. Rychert on behalf of the PHI
13 Companies (Rychert at 7, lines 4-6), and Mr. Campbell of Mirant Mid-Atlantic,
14 LLC ("Mirant") (Campbell at 6-8) echoed the concern addressed in my Initial
15 Testimony that the current PJM ICAP model creates a "boom-and-bust" market
16 for capacity supplies.

17 **Q: DOES PJM RECOGNIZE THE SHORT-TERM NATURE OF THE**
18 **CURRENT ICAP MARKET AND ITS RESULTING "BOOM-AND-BUST"**
19 **OUTCOME?**

20 **A:** Yes. PJM witness Mr. Herling states, "the current construct is a short-term
21 construct" (Herling at 23, lines 15-16). Mr. Herling goes on to recognize the
22 volatility that occurs in the PJM ICAP market when the region is either short or

1 long of capacity (Herling at 24, lines 14-21) and that it may be a threat to long-
2 term resource adequacy (Herling at 25, lines 19-22).

3 **Q: DID OTHER PARTIES SUPPORT THE CONTINUED USE OF PJM'S**
4 **CURRENT ICAP MARKET?**

5 **A:** Yes. Maryland Office of People's Counsel ("OPC") witness Jonathan Wallach
6 and Southern Maryland Electric Cooperative, Inc. ("SMECO") witness Richard
7 A. Hendershot both supported maintaining the current PJM ICAP methodology in
8 some fashion. While both suggested potential modifications to the current ICAP
9 methodology, their proposed changes will not alleviate the flaws of the PJM's
10 current ICAP methodology. Ultimately, the changes proposed do not resolve one
11 of the major existing problems of the current ICAP market; that is, permitting new
12 resources to compete to resolve resource adequacy in times of resource shortages.
13 The forward-looking nature of proposals like RRC eliminate this barrier to entry
14 and permit greater competition among more suppliers to establish resource
15 adequacy.

16 **Q: OPC WITNESS JONATHAN WALLACH TESTIFIES THAT MARKET**
17 **POWER MANIPULATION OPPORTUNITIES EXIST UNDER THE**
18 **CURRENT PJM ICAP MODEL. IF ADOPTED, WOULD THE RRC**
19 **MODEL RESOLVE THESE CONCERNS?**

20 **A:** Yes. The RRC solves significant market power concerns because of its forward-
21 looking design and use of a competitive auction. Since the RRC is designed to
22 permit new entrants to compete in the resource auction, the most significant
23 barrier to entry is eliminated and the opportunity for competition is increased via

1 market-based rules instead of administrative rules. Thus, if price signals rise to
2 non-competitive levels, new entrants will undercut those bidders that cause prices
3 to rise and introduce vigorous competition in the capacity market to maintain
4 resource adequacy at a reasonable cost at or below new entry level.

5 Mr. Wallach seeks to demonstrate how a pivotal supplier might exert market
6 power since at least a portion of that supplier's resources are required to clear the
7 market (Wallach at 15, lines 1-16). The RRC addresses these concerns by
8 eliminating barriers to entry. In other words, if a "dominant" supplier is bidding
9 prices above new entrant prices, multiple new entrants can enter the auction, drive
10 prices down via competition, and eliminate the opportunity for the "dominant"
11 supplier to be a price setter. This market-based approach should be the
12 Commission's preferred approach to a resource adequacy model.

13 **Q: WHAT DOES MR. WALLACH PROPOSE AS A SOLUTION TO THE**
14 **POTENTIAL FOR MARKET POWER?**

15 **A:** Mr. Wallach proposes that the PJM Market Monitoring Unit ("MMU") should
16 seek authorization to "employ explicit market mitigation measures" (Wallach at
17 17, lines 11-13).

18 **Q: DOES MR. WALLACH'S PROPOSAL PROVIDE FOR RESOURCE**
19 **ADEQUACY?**

20 **A:** No. Explicit market mitigation measures such as those proposed by Mr. Wallach
21 do not provide for resource adequacy. One of the fundamental flaws of the
22 current PJM ICAP market is that capacity is procured using a minimal time
23 horizon. Thus, the capacity needed to meet situations where demand is greater

1 than supply cannot be built or otherwise brought to market in time to address the
2 shortage. Thus, market mitigation measures do not provide for resource adequacy
3 and do not prevent shortages. No form of mitigation can solve this fundamental
4 flaw in the PJM ICAP design. In other words, the mitigation is simply masking
5 the symptoms resulting from the market design while permitting the cause to
6 continue unabated. In the end, the treatment of this problem through mitigation
7 will result in higher costs to consumers and/or less reliable electric markets.
8 Obviously, neither outcome is in the public interest.

9 **Q: IS THERE A MARKET-BASED ALTERNATIVE TO THIS**
10 **ADMINISTRATIVE APPROACH?**

11 **A:** Yes. As described in the principles above and proposed in the RRC, a sufficiently
12 forward-looking resource adequacy model will eliminate barriers to entry and
13 significantly reduce and even eliminate the opportunity to exert market power.
14 Because new entrants can participate in the RRC auction, the opportunity for the
15 exercise of market power is mitigated without the need for additional
16 administrative rules.

17 **Q: MR. WALLACH TESTIFIES THAT “CAPACITY REVENUES**
18 **REPRESENT A MINOR PORTION OF THE OVERALL REVENUE**
19 **STREAM” OF A NEW RESOURCE PROJECT. IS THIS ACCURATE?**

20 **A:** Looking at today’s PJM market where there is excess capacity and market prices
21 for capacity at or near zero, it is accurate to say that capacity revenues are a minor
22 portion of a capacity resource’s overall revenue stream. However, this does not
23 mean that capacity revenues are an insignificant or unimportant part of a

1 resource's overall revenue. Capacity revenue, in a market designed to provide
2 appropriate compensation for the service provided, comprises an important part of
3 the overall revenue for a resource and may influence the decision of a resource to
4 participate in that market.

5 **IV. A NEW YORK ISO-STYLE DEMAND CURVE DOES NOT PROVIDE A**
6 **MARKET-BASED SOLUTION TO RESOURCE ADEQUACY**

7 **Q: DID SOME PARTIES SUPPORT AN ALTERNATIVE TO PJM'S**
8 **CURRENT ICAP MECHANISM SIMILAR TO NYISO'S DEMAND**
9 **CURVE?**

10 **A:** Yes. Mr. Pino of BGE (Pino at 10, lines 4-8), the comments of ConEd (ConEd at
11 4), and Mr. Campbell of Mirant (Campbell at 12, lines 5-7) all supported an
12 approach similar to the NYISO demand curve. As described, this approach uses
13 an administratively-determined sloped demand curve to set capacity prices instead
14 of a vertical demand curve to set a target level of capacity. Thus, all capacity
15 resources, including those above and beyond the RTO or NERC "prescribed"
16 level of reserve margin, receive some capacity payment for their availability.

17 **Q: DOES A NYISO-STYLE DEMAND CURVE UTILIZE MARKET-BASED**
18 **COMPETITION TO DETERMINE THE PREVAILING CAPACITY**
19 **PRICE?**

20 **A:** No. A demand curve utilizes administratively-determined prices to establish a
21 clearing price for capacity resources. The clearing price is not a result of existing
22 and potential capacity resources making competitive bids.

1 **Q: MR. RYCHERT TESTIFIES THAT PHI COMPANIES' CONCERN "IS**
2 **TO MAKE SURE THAT THE PJM CAPACITY MARKET IS**
3 **STRUCTURED TO MAINTAIN THE CURRENT STABILITY OF**
4 **CAPACITY PRICES." DO YOU AGREE THAT THIS SHOULD BE THE**
5 **GOAL OF A NEW RESOURCE ADEQUACY MECHANISM?**

6 **A:** No. While the outcome of an appropriately developed resource adequacy
7 mechanism, like RRC, will result in stable and known capacity prices through the
8 term of the forward-looking procurement, a primary goal should be to ensure
9 resource adequacy via market-based mechanisms rather than administrative
10 mechanisms and a resource commitment period that allows for new entry to
11 compete to provide needed resources to meet the adequacy requirements.

12 **Q: BGE WITNESS MR. PINO STATES "THERE SHOULD BE**
13 **INTERREGIONAL APPROACHES TOWARDS ANYTHING THAT**
14 **MIGHT OTHERWISE DISTORT FREE-FLOWING MARKET**
15 **SIGNALS." DO YOU AGREE WITH THIS STATEMENT?**

16 **A:** Yes. A regional or multi-RTO approach to resource adequacy could be beneficial
17 for the market. It increases the number of competitors in the market, reduces or
18 eliminates seams between markets, and standardizes the otherwise piecemeal
19 market. However, it is important to recognize that different regions may have
20 different levels of reserve requirements so it will be difficult to make a multi-RTO
21 approach exactly uniform. This obstacle should not preclude the efforts to
22 establish a regional approach to resource adequacy.

1 **V. THE RAM PROPOSAL IS NOT A COMPLETE RESOURCE ADEQUACY**
2 **APPROACH**

3 **Q: PLEASE DESCRIBE THE SIMILARITIES BETWEEN RELIANT’S RRC**
4 **PROPOSAL AND THE RAM PROPOSAL.**

5 **A:** There are several similarities between the RRC and the current RAM proposal
6 before PJM. Both are intended to provide resource adequacy by relying on
7 market forces, use a forward-looking design, and look to ensure compatibility
8 with retail access. More specifically, both models use a three-year forward
9 planning horizon to determine the required capacity to achieve resource adequacy
10 in the future while minimizing barriers to entry.

11 **Q: PLEASE DESCRIBE THE SIGNIFICANT DIFFERENCES BETWEEN**
12 **RELIANT’S RRC PROPOSAL AND THE RAM PROPOSAL?**

13 **A:** The most significant difference is the RRC’s use of a one-year resource
14 commitment (referred to as the “target year”) while the current RAM proposal
15 recommends a three-year resource commitment (referred to as the “commitment
16 period”). In other words, while the RRC looks to ensure resource adequacy year-
17 to-year on a three-years forward basis, the current RAM proposal seeks to involve
18 the RTO in arranging resources up to six years into the future. Since potential
19 new entrants generally take only three years to build a new resource to meet a
20 region’s reliability needs, it is unnecessary to procure for a period of time several
21 years beyond the time an actual decision to enter a market is needed. Ultimately,
22 the RAM approach can result in the over-procurement of resources well into the
23 future and the tendency to reintroduce boom and bust cycles.

1 Another difference is the significant mitigation the RAM proposal may adopt in
2 the form of an offer cap. Offer caps can prevent new entrants or otherwise
3 competitive resources from participating in the resource adequacy market and
4 result in a barrier to entry. Because of the natural removal of significant barriers
5 to entry achieved by both the RRC and the RAM model by looking to achieve
6 resource adequacy three-years forward, an offer cap is unnecessary.

7 **Q: MIRANT WITNESS MR. CAMPBELL DISCUSSES THREE STRENGTHS**
8 **OF THE “CENTRALIZED AUCTION” APPROACH LIKE THE RAM**
9 **PROCESS. DO YOU AGREE WITH HIS COMMENTS?**

10 **A:** Generally, yes. Both the current RAM proposal and Reliant’s RRC utilizes a
11 planning horizon of three years to eliminate barriers to entry and permit
12 significant competition while protecting the market from market power concerns.
13 The centralization of the process such that all LSEs are on a level playing field is
14 also an appropriate resource adequacy design feature and is included in the RRC
15 model. However, I disagree with Mr. Campbell regarding the needed commitment
16 period. He notes that the three-year commitment period is needed to provide “for
17 a minimal expectation of revenue certainty for developers” (Campbell at 10, lines
18 9-10). I believe this can be adequately accomplished utilizing a one-year
19 commitment. Not only does this allow the market to react to changes in market
20 conditions from year to year, it also allows the RTO to maintain focus on resource
21 adequacy and permits market participants to address risk management. If
22 capacity resources need a longer-term revenue stream, it is possible to contract
23 with parties in the marketplace. It is not necessary to use an auction mechanism

1 designed to achieve resource adequacy for long-term contracts that address certain
2 risk management goals.

3 **Q: MR. CAMPBELL ALSO TESTIFIES THAT THERE ARE SEVERAL**
4 **WEAKNESSES TO THE CENTRALIZED AUCTION, LIKE THAT**
5 **PROPOSED IN THE RAM PROCESS. DO YOU AGREE WITH HIS**
6 **CONCLUSIONS?**

7 **A:** No. While his first concern regarding regulatory certainty is valid, I believe a
8 robust resource adequacy mechanism like RRC will alleviate regulatory concerns
9 related to capacity markets.

10 Mr. Campbell also notes that there is no prepayment made to the developer of a
11 resource after it is chosen in the auction process. Mr. Campbell notes that those
12 chosen in the auction “have no current revenue stream to attract financing or to
13 reduce costs of the new or existing generation” (Campbell at 11, lines 3-5). In
14 general, it is unrealistic to expect a “downpayment” for a variety of reasons.
15 First, assuming resource availability in the years in which a resource is committed
16 to the market, a known price will be received that was considered acceptable to
17 the resource owner at the time of the auction. Also, because the capacity price in
18 the commitment year is known, financing will be easier than if there was
19 uncertainty surrounding the future price of capacity as there is today. Finally,
20 where the resource adequacy model uses an annual auction to arrange for
21 capacity, the market has the assurance that capacity market prices will clear based
22 on the fundamentals of supply and demand such that there is certainty that a
23 capacity payment will exist from one target year to the next for those resources

1 chosen in the auction. It is also notable that forward-based energy contracts
2 generally do not include advanced payment but still provide certainty via contract.
3 Mr. Campbell also testifies that the descending clock auction is “designed to
4 result in minimal costs to consumers through ruthless competitive pressures of
5 repeated auction rounds” (Campbell at 11, lines 12-14). While determining a
6 market-clearing price through a descending clock auction is a viable method to
7 achieve a competitive market-clearing price, we believe the single bid and
8 market-clearing price auction for an RTO-ISO type adequacy requirement sends a
9 clearer price signal consistent with a market-based determination. Ultimately,
10 competition for the benefit of consumers is a goal all participants should be
11 interested in achieving.

12 **Q: MR. WALLACH DISCUSSES THREE ITEMS THAT THE RAM**
13 **PROCESS SHOULD CONSIDER. WILL THESE ALTERATIONS**
14 **CREATE A WELL-DESIGNED RESOURCE ADEQUACY MODEL?**

15 **A:** No. Mr. Wallach’s first recommendation is to shorten the forward planning
16 horizon purportedly to decrease the length of the contract term and to provide
17 better opportunities for demand-response providers to participate (Wallach at 27,
18 lines 2-3). While it is a laudable goal to include demand-response in the capacity
19 market—as RRC does—reducing the forward planning horizon effectively shuts
20 out new generation resources from participating in the auction. Maintaining this
21 significant barrier to entry prevents one of the best market-based tools to reduce
22 or eliminate opportunities for the exercise of market power: the entry of new
23 generating resources. For this reason, the RRC attempts to balance the inclusion

1 of all potential resources—including demand response—onto a level-playing field
2 for the benefit of the market.

3 Mr. Wallach’s second recommendation is to extend the commitment period up to
4 six years, with an auction to fulfill a portion of the resource adequacy
5 requirements each year (Wallach at 27, line 3-4). This approach to resource
6 adequacy significantly shifts the scope of the RTO’s role in resource adequacy.
7 Instead of procuring the entirety of resource adequacy needs on a three-years
8 forward basis as the RRC does, Mr. Wallach’s proposal would expand the role of
9 RTO resource adequacy into risk management as well. In other words, by
10 procuring only a portion of the necessary resources, the market now depends upon
11 the RTO for risk management services. Inherent in this type of service is the
12 “risk” portion. The RTO should not participate in such services. Instead, market
13 participants should respond to market demand to provide this service and further
14 take on the risks and rewards of providing such a service. The RRC model will
15 achieve resource adequacy while permitting market participants to provide or seek
16 out risk management services in the marketplace, not in an RTO-sponsored
17 resource adequacy program.

18 Stretching out the commitment over a number of years also results in significant
19 uncertainties for both suppliers and buyers of capacity resources. Since the RTO
20 would now be required to make a forecast six years forward, the likelihood of
21 forecast error increases significantly. This increases the risks that both suppliers
22 and LSEs face in procuring capacity to ensure resource adequacy and creates and
23 unnecessary level of uncertainty to provide resource adequacy.

1 Mr. Wallach's third recommendation is to permit capacity suppliers to commit
2 resources to a contract term of one, two, or three years (Wallach at 27, line 4-5).
3 By mixing and matching contract terms, Mr. Wallach's proposal will only serve
4 to increase complexity of capacity obligations instead of focusing on resource
5 adequacy. The RRC contract term of one year is sufficient to provide an
6 opportunity for all resources to participate. It further assures resource adequacy
7 during the year for which the auction is being held based on the existing demand
8 forecast. Splitting the contracts into different lengths may provide unnecessary
9 advantages to one kind of resource over another in a given contract tranche.
10 The RRC model uses a better approach to achieve resource adequacy. By
11 determining forecasted demand three years forward and arranging for capacity
12 resources to achieve resource adequacy in the target year, the RRC model
13 minimizes potential forecast error relative to a six-year forecast while still
14 eliminating barriers to entry. Arranging for capacity farther into the future could
15 increase forecast uncertainty while arranging for capacity closer to the target year
16 would significantly increase barriers to entry. The RRC strikes the appropriate
17 balance between these two issues.

18 **Q: THE CURRENT RAM PROCESS PROPOSAL UTILIZES A**
19 **COMMITMENT PERIOD OF THREE YEARS COUPLED WITH A**
20 **ROLLING AUCTION. IS THIS NECESSARY TO ENSURE RESOURCE**
21 **ADEQUACY?**

22 **A:** No. This approach only results in more resource adequacy uncertainty. Since
23 only portions of required resources are being obtained three years forward, there

1 is no assurance of resource adequacy until the final auction—just one year prior to
2 the start of the three-year commitment period. Thus, the earlier auctions have
3 little to do with resource adequacy and more to do with risk management for the
4 LSEs. Risk management should not be a role of the RTO; instead, market
5 participants should manage their own risks. The RTO-sponsored capacity market
6 should be designed to provide resource adequacy. This is why the RRC approach
7 auctions the entire forecasted demand three years prior to the single commitment
8 year. This allows the RTO to achieve resource adequacy at a known price in
9 advance of the commitment period without follow-up auctions to fill in remaining
10 capacity needs at differing clearing prices. From a strict resource adequacy
11 perspective, why should 80 percent of the resources procured three years prior be
12 paid a different price than the remaining 20 percent of resource procured in the
13 prompt year? PSEG witness Dr. Bhavaraju articulates some of the additional
14 benefits of procuring the entire need of the target year in a single auction,
15 including reducing the ability for any capacity supplier to exert market power
16 (Bhavaraju at 19, lines 4-19).

17 **Q: THE RAM PROPOSAL INCLUDES A DEFICIENCY CHARGE FOR**
18 **RESOURCES THAT FAIL TO MEET THEIR COMMITMENT. IS THIS**
19 **AN APPROPRIATE APPROACH TO ENSURE RESOURCE**
20 **ADEQUACY?**

21 **A:** No. A properly designed resource adequacy model should not need a penalty
22 provision such as a deficiency charge. First, consider the loss to a non-
23 performing resource: it is not paid for services that are not rendered. Thus,

resources have a very strong economic incentive to be available. Second, if a penalty structure was implemented in a properly designed resource adequacy model using an auction process, resource providers will consider the likelihood of penalty costs in their bidding. In other words, the expected value of the penalties will be priced into the bid by the resource. As a result, consumers end up paying more for resource adequacy as a result of a penalty provision without the added benefit of “additional” resource adequacy. Third, resource adequacy takes into consideration outages, both planned and forced, that happen from time to time. In general, this means that while one or several units may be off-line, enough “cushion” exists such that resource adequacy is maintained. Fourth, deficiency charges do nothing to actually provide resource adequacy. Instead, the deficiency charge adds additional penalties to a non-performing entity via administrative means. Finally, as I noted in my Initial Testimony, resources committed in the auction are subject to the Federal Energy Regulatory Commission’s rules and regulations. Those that act in a manner inconsistent with the applicable rules could be subject to the revocation of market-based rate authority or other significant restrictions.

Q: SMECO WITNESS MR. HENDERSHOT TESTIFIES THAT THE CURRENT RAM PROPOSAL “REQUIRES LSES TO COMMIT TO CAPACITY OBLIGATIONS BASED UPON ESTIMATES BEFORE THE GENERATORS BUILD ADDITIONAL CAPACITY.” IS THIS ACCURATE?

1 **A:** No. As I understand it, the RAM proposal and RRC are very similar in this
2 respect. In both models, the RTO makes arrangements for capacity resources on
3 behalf of all LSEs based on forecasted demand. While resources are committed
4 on a forward-looking basis, the LSE is not required to make any arrangements
5 with capacity at the time of the auction. In fact, an LSE never has to make any
6 arrangements with capacity at all. If an LSE takes this approach, in the target
7 year the LSE will pay its load ratio share based upon the auction-clearing price for
8 capacity resources for that obligation year. I am not aware of any requirement
9 that an LSE must “commit” to capacity obligations out of the auction.

10 **Q: MR. HENDERSHOT TESTIFIES THAT A MULTI-YEAR AUCTION IS**
11 **NOT NECESSARY BECAUSE THE RECORD IN PJM TO DATE DOES**
12 **NOT INDICATE THAT THERE WILL BE INADEQUATE CAPACITY**
13 **BUILT IN PJM IN THE FUTURE. IS THIS REASONABLE?**

14 **A:** No. This reasoning ignores the various and substantial problems with the current
15 PJM ICAP market that I and several other parties—including PJM witness Mr.
16 Herling—discussed in Initial Testimony. Chief among these issues is the problem
17 associated with the “boom-and-bust” nature of the current market.

18 **Q: MR. HENDERSHOT STATES THAT THE RAM PROPOSAL INCLUDES**
19 **PRICING ALL CAPACITY AT THE COST OF A PROXY UNIT. IS THIS**
20 **ACCURATE?**

21 **A:** No. As I understand it, the RAM proposal, like Reliant’s RRC, will utilize an
22 auction process to determine capacity costs for some future year. Therefore, it is





















1 unreasonable to suggest that the market clearing price—in a region where there is
2 a known surplus—will clear at a proxy level.

3 **Q: DOES THIS CONCLUDE YOUR REPLY TESTIMONY?**

4 **A:** Yes.

Exhibit A

Comparison of Resource Adequacy Approaches and Principles


Resource Adequacy Approach Principles	Reliant Regional Reliability Commitment	Current PJM ICAP Market	NYISO Demand Curve	RAM Process Proposal
1) Sufficiently Forward Looking Design				
2) Elimination of Significant Barriers to Entry				
3) Enforceability to Ensure No Free Riders				
4) Utilization of Asset-Backed and Deliverable Resources				
5) Accommodates Retail Access Programs				

**BEFORE THE
MARYLAND PUBLIC SERVICE COMMISSION**

**In The Matter of the Inquiry Into)
Generating Resource Adequacy.)** **Case No. 8980**

AFFIDAVIT OF WITNESS

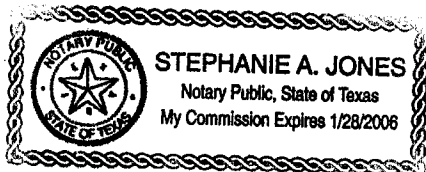
I, Frederick John Meyer, being duly sworn, depose and say that the Prepared Reply Testimony of Frederick John Meyer served on behalf of Reliant Resources, Inc. in this proceeding is my testimony, and to the best of my knowledge, information and belief, is true, accurate and complete, and I hereby adopt said testimony as if given by me in formal hearing, under oath.




Frederick John Meyer

I hereby certify that on this ____ day of January, 2004 before me, an officer duly authorized in Travis County in the State of Texas to take acknowledgments, personally appeared Frederick John Meyer who is personally known to me that he executed this affidavit of signature as his free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 7th day of January, 2004.






Notary Public
State of Texas
My Commission Expires: 1/28/2006

CERTIFICATE OF SERVICE

I hereby certify that I have this 9th day of January 2004 served a copy of the foregoing documents by first class mail, postage prepaid, upon all parties to this case as listed and maintained on the Maryland Public Service Commission's website.

A handwritten signature in black ink, appearing to read "Randall S. Rich", is written over a horizontal line.

Randall S. Rich